



FOOD SAFETY FACT SHEET

Kansas Department of Agriculture • Division of Food Safety and Lodging
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Two-Stage Cooling

Cooked potentially hazardous foods need to move quickly through the temperature danger zone to limit growth of micro-organisms that can lead to foodborne illness.

A two-stage cooling process is required if the one-stage cooling process is not used. The steps are:

1. From 135°F to 70°F within 2 hours; and
2. From 70°F to 41°F within 4 hours.

The one-stage cooling process is to cool the food to 41°F within 4 hours if food is prepared using ingredients normally stored at room temperature, like tuna salad.

Many foods require manipulation to cool quickly. Possible methods include:

- Placing food in shallow pans
- Separating food into smaller or thinner portions (2 inch depth for thick foods/4 inch depth for thin liquids)
- Cutting large pieces of meat into pieces no larger than 4 inches or 4 pounds
- Stirring the food as it cools
- Using an ice paddle or other equipment to stir the food
- Adding ice directly to the product as an ingredient
- Using rapid chill refrigeration equipment
- Placing food in containers (i.e. metal containers in refrigeration) that encourage quick cooling*
- Placing food in an ice-bath

*** Reminder: Food should not be left out on the counter to cool under any circumstances.**